



# UNITED STATES PATENT AND TRADEMARK OFFICE

**UNITED STATES DEPARTMENT OF COMMERCE**  
**United States Patent and Trademark Office**  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/054,438

01/22/2002

Gregory D. U'ren

00CON134P-DIV

7270

25700

7590

12/27/2005

**FARJAMI & FARJAMI LLP**  
26522 LA ALAMEDA AVENUE, SUITE 360  
MISSION VIEJO, CA 92691

EXAMINER

PHAM, LONG

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/054,438		U'REN, GREGORY D.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Long Pham		2814	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 46 and 47 is/are allowed.
- 6) ☒ Claim(s) 1-22, 24-40, and 42-45 is/are rejected.
- 7) ☒ Claim(s) 23 and 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### Rejections and/or objections necessitated by the amendments

#### *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 18 as presently amended and 19-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (AAPA) in combination with Shimawaki (US patent 5,321,302) and Racanelli (US publication 2002/0117734) (a reference of record, newly applied).

AAPA in combination with Shimawaki teach the claimed invention. **See the contents of office action dated 07/19/05.**

With respect to amended claim 18, AAPA in combination with Shimawaki fail to teach a silicon oxide structure is formed between the base contact and a substrate and the base contact is in direct contact with the silicon oxide structure.

Racanelli teaches a similar device in which a silicon oxide structure 110 is formed between a base contact and a substrate and the base contact is in direct contact with silicon oxide structure. See fig. 1 and associated text.

It would have been obvious to one of ordinary skill in the art of making semiconductor devices to incorporate the above teaching of Racanelli into the device of AAPA and Shimawaki to provide electrical isolation from other devices on the substrate. See [0021].

Claims 25 as presently amended and 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (AAPA) in combination with Shimawaki (US patent 5,321,302) and Racanelli (US publication 2002/0117734) (a reference of record, newly applied).

AAPA in combination with Shimawaki teach the claimed invention. **See the contents of office action dated 07/19/05.**

With respect to amended claim 25, AAPA in combination with Shimawaki fail to teach a silicon oxide structure is formed between the base contact and a substrate and the base contact is in direct contact with the silicon oxide structure.

Racanelli teaches a similar device in which a silicon oxide structure 110 is formed between a base contact and a substrate and the base contact is in direct contact with silicon oxide structure. See fig. 1 and associated text.

It would have been obvious to one of ordinary skill in the art of making semiconductor devices to incorporate the above teaching of Racanelli into the device of AAPA and Shimawaki to provide electrical isolation from other devices on the substrate. See [0021].

Claims 36 as presently amended and 37-40, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (AAPA) in combination with Shimawaki (US patent 5,321,302) and Racanelli (US publication 2002/0117734) (a reference of record, newly applied).

AAPA in combination with Shimawaki teach the claimed invention. **See the contents of office action dated 07/19/05.**

With respect to amended claim 36, AAPA in combination with Shimawaki fail to teach a silicon oxide structure is formed between the base contact and a substrate and the base contact is in direct contact with the silicon oxide structure.

Racanelli teaches a similar device in which a silicon oxide structure 110 is formed between a base contact and a substrate and the base contact is in direct contact with silicon oxide structure. See fig. 1 and associated text.

It would have been obvious to one of ordinary skill in the art of making semiconductor devices to incorporate the above teaching of Racanelli into the device of AAPA and Shimawaki to provide electrical isolation from other devices on the substrate. See [0021].

***Response to Arguments***

Applicant's arguments with respect to claims 1-22, 24-40, and 42-45 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

Claims 46 and 47 are allowed.

Claims 23 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long Pham whose telephone number is 571-272-1714. The examiner can normally be reached on Mon-Frid, 10am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax

Art Unit: 2814

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Long Pham

Primary Examiner

Art Unit 2814

LP